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10/666,177	09/22/2003	Takatoshi Okagawa	242959US90	8769

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EXAMINER
ROBERTS, BRIAN S

ART UNIT	PAPER NUMBER
2619	

NOTIFICATION DATE	DELIVERY MODE
04/14/2008	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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	Application No.	Applicant(s)
	10/666,177	OKAGAWA ET AL.
Office Action Summary	Examiner	Art Unit	
	BRIAN ROBERTS	2619	

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>01 February 2008</u>.

2a)☒ This action is **FINAL.**   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-19</u> is/are pending in the application.

     4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-19</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

     a)☐ All   b)☐ Some * c)☐ None of:

       1.☐ Certified copies of the priority documents have been received.

       2.☐ Certified copies of the priority documents have been received in Application No. _____.

       3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

     * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO/SB/08)
     Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
     Paper No(s)/Mail Date. _____

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

DETAILED ACTION

- Claims 1-19 remain pending.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 15-16 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claims 16 and 17 are directed to neither a manufacture or a machine, but rather embraces or overlaps two different statutory classes of invention set forth in 35 U.S.C. 101 which is drafted so as to set forth the statutory classes of invention in the alternative only.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 15-16 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The limitation "A computer-readable storage

medium encoded with a data structure" is not supported by the original disclosure and

therefore is considered new matter.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly
claiming the subject matter which the applicant regards as his invention.

Claims 15 and 16 are rejected under 35 U.S.C. 112, second paragraph, as being

indefinite for failing to particularly point out and distinctly claim the subject matter which

applicant regards as the invention.

-    In reference to claim 15 and 16

Claim 15 and 16 are indefinite because its unclear whether the claim are directed

to a computer readable medium encoded with a data structure which is a manufacture,

or are directed to a communication system comprising a source router, destination

router, destination mobile terminal and source mobile terminal which is a machine. The

claims must be directed towards either a manufacture or a machine.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by
another filed in the United States before the invention by the applicant for patent or (2) a patent
granted on an application for patent by another filed in the United States before the invention by the
applicant for patent, except that an international application filed under the treaty defined in section
351(a) shall have the effects for purposes of this subsection of an application filed in the United States
only if the international application designated the United States and was published under Article 21(2)
of such treaty in the English language.

Claims 1-14 and 17-19 are rejected under 35 U.S.C. 102(e).as being anticipated
by Okagawa et al. (US 6958988)

-    In reference to claim 1 and 7

In Figure 1, Okagawa et al. teaches a mobile communication control system and
method that includes a location information server (100) and a plurality of edge nodes,
wherein the location information server (100) includes

- An address managers configured to manage a IP address of a destination
  mobile station (first address of a destination mobile station) associated with
  an address of a destination edge node supervising the destination mobile
  station (second address of the destination mobile station) (column 6 line 66 -
  column 7 line 15)

- An instructor configured to instruct a source edge node connected to a source
  mobile station via a radio circuit and a destination edge node connected to
  the destination mobile station via a radio circuit to store the IP address of the
  destination mobile station (first address of a destination mobile station)
  associated with the address of the edge node supervising the destination
  mobile station (second address of the destination mobile station) (column 6
  line 66 - column 7 line 15)

wherein the source edge node includes:

- A first address memory configured to store the IP address of the destination
  mobile station (first address of a destination mobile station), in accordance

with the instruction from the location information server (100), (column 9 lines 42- column 10 line 39)

- An address converter configured to convert the IP address of the destination mobile station (first address of a destination mobile station) which is included in a packet received from the source mobile station as a destination address, to the address of the edge node supervising the destination mobile station (second address of the destination mobile station) which is associated with the IP address of the destination mobile station (first address of a destination mobile station) in the first address memory (column 9 lines 42 - column 10 line 39)

- A routing processor configured to route the received packet to the destination edge node connected to the destination mobile station via a radio circuit, in accordance with the second address of the destination mobile station (column 9 lines 42 - column 10 line 39)

wherein the destination edge node comprises:

- A second address memory configured to store the IP address of the destination mobile station (first address of a destination mobile station) (column 9 lines 42 - column 10 line 39)

- An address converter configured to convert the address of the edge node supervising the destination mobile station (second address of the destination mobile station) which is included in the received packet as a destination address, to the IP address of the destination mobile station (first address of a

destination mobile station) which is associated with the second address of the
destination mobile station in the second address memory (column 9 lines 42 -
column 10 line 39)

- A packet transferring processor configured to transfer the received packet to
  the destination mobile station, in accordance with the first address of the
  destination mobile station (column 9 lines 42 - column 10 line 39)

- In reference to claim 2

In Figure 6, Okagawa et al. further teaches the destination edge node further
includes a selection notifier configured to select the second address of the destination
mobile station which is associated with the first address of the destination mobile station
in the second memory, and to notify the selected second address of the destination
mobile station to the location information server (100), when the destination mobile
station moves into a predetermined area and wherein the address manager of the
location information server (100) is configured to manage the notified second address of
the destination mobile station associated with the first address of the destination mobile
station. (column 9 lines 42 - column 10 line 39)

- In reference to claim 3

In Figure 6, Okagawa et al. further teaches the source edge node further
includes an inquirer configured to inquire as to the second address of the destination
mobile station of the location information server (100), when the first address memory

does not store the second address of the destination mobile station associated with the

first address of the destination mobile station which is included in the packet received

from the source mobile station as a destination address; and the instructor of the

location information server (100) is configured to instruct the source edge node to store

the first address of the destination, mobile station associated with the second address of

the destination mobile station, in accordance with the inquiry from the source edge

node. (column 9 lines 42 - column 10 line 39)

-    In reference to claim 4, 9

In Figure 6, Okagawa et al. further teaches the address manager of the location

information server (100) is configured to update the first address of the destination

mobile station and the second address of the destination mobile station which are

associated with each other, in accordance with a movement of the destination mobile

station. (column 9 lines • 42 - column 10 line 39)

-    In reference to claim 5, 10

In Figure 1, Okagawa et al. further teaches the instructor of the location

information server (100) is configured to instruct a edge node which is not in a route of

the packet from the source mobile station to the destination mobile station, to delete the

managed first address of the, destination mobile station and the managed second

address of the destination mobile station. (column 6 line 66 - column 7 line 15)

- In reference to claim 6, 12, 14

In Figure 3, Okagawa et al. further teaches the address converter of the source edge node or the destination edge node is configured to distinguish the first address of the destination mobile station from the second address of the destination mobile station, in accordance with at least one decision bit in the packet. (column 7 lines 21-37)

- In reference to claim 8

In Figure 1, Okagawa et al. teaches a location information server (100) used in a mobile communication network for transferring a packet from a source mobile station to a destination mobile station via a plurality of edge nodes, the location information server (100) includes

- An address managers configured to manage a IP address of a destination mobile station (first address of a destination mobile station) associated with an address of a destination edge node supervising the destination mobile station (second address of the destination mobile station) (column 6 line 66 - column 7 line 15)

- An instructor configured to instruct a source edge node connected to a source mobile station via a radio circuit and a destination edge node connected to the destination mobile station via a radio circuit to store the IP address of the destination mobile station (first address of a destination mobile station) associated with the address of the edge node supervising the destination

mobile station (second address of the destination mobile station) (column 6
line 66 - column 7 line 15)

-    In reference to claim 11

In Figure 1, Okagawa et al. teaches an edge node connected to a source mobile
station that includes:

- An inquirer configured to inquire as to an address of the edge node
  supervising the destination mobile station (second address of the destination
  mobile station) of a location information server (100), when a first address
  memory does not store the second address of the destination mobile station
  associated with an IP address of the destination mobile station (first address
  of a destination mobile station) which is included in a packet received from
  the source mobile station as a destination address (column 9 lines 42 -
  column 10 line 39)

- A first address memory configured to store the IP address of the destination
  mobile station (first address of a destination mobile station), in accordance
  with the instruction from the location information server (100) (column 9 lines
  42- column 10 line 39)

- An address converter configured to convert the IP address of the destination
  mobile station (first address of a destination mobile station) which is included
  in a packet received from the source mobile station as a destination address,
  to the address of the edge node supervising the destination mobile station

(second address of the destination mobile station) which is associated with the IP address of the destination mobile station (first address of a destination mobile station) in the first address memory (column 9 lines 42 - column 10 line 39)

- A routing processor configured to route the received packet to a destination edge node connected to the destination mobile station via a radio circuit, in accordance with the second address of the destination mobile station (column 9 lines 42 - column 10 line 39)

- In reference to claim 13

In Figure 1, Okagawa et al. teaches an edge node connected to a destination mobile station includes

- a selection notifier configured to select the address of the edge node supervising the destination mobile station (second address of the destination mobile station) which is associated with the IP address of the destination mobile station (first address of a destination mobile station) in the second memory, and to notify the selected second address of the destination mobile station to the location information server (100), when the destination mobile station moves into a predetermined area and wherein the address manager of the location information server (100) manages the notified second address of the destination mobile station associated with the IP address of the

destination mobile station (first address of a destination mobile station)

(column 9 lines 42 - column 10 line 39)

- A second address memory configured to store the IP address of the

  destination mobile station (first address of a destination mobile station)

  (column 9 lines 42 - column 10 line 39)

- An address converter configured to convert the address of the edge node

  supervising the destination mobile station (second address of the destination

  mobile station) which is included in the received packet as a destination

  address, to the IP address of the destination mobile station (first address of a

  destination mobile station) which is associated with the second address of the

  destination mobile station in the second address memory (column 9 lines 42 -

  column 10 line 39)

- A packet transferring processor configured to transfer the received packet to,

  the destination mobile station, in accordance with the first address of the

  destination mobile station (column 9 lines 42 - column 10 line 39)

- In reference to claim 17

     In Figure 1, Okagawa et al. further teaches the address converter of the source

edge node is configured to convert a first address of the source mobile station which is

included in a packet received from the source mobile station as a source address, to a

second address of the source mobile station which is associated with the first address

of the source mobile station; and the address converter of the destination edge node is

configured to convert the second address of the source mobile station which is included

in the received packet as a source address, to the first address of the source mobile

station which is associated with the second address of the source mobile station.

(column 9 lines 42 - column 10 line 39)

-    In reference to claim 18

In Figure 1, Okagawa et al. further teaches that the address converter is

configured to convert a first address of the source mobile station which is included in the

packet received from the source mobile station as a source address, to a second

address of the source mobile station which as associated with the first address of the

source mobile station. (column 9 lines 42 - column 10 line 39)

-    In reference to claim 19

In Figure 1, Okagawa et al. further teaches that address converter is configured

to convert a second address of the source mobile station which is included in a received

packet as a source address, to a first address of the source mobile station which is

associated with the second address of the destination mobile station. (column 9 lines 42

- column 10 line 39)

Response to Arguments

Applicant's arguments filed 02/01/2008 have been fully considered but they are

not persuasive.

- In the Remarks on pg. 17 of the Amendment, the Applicant contends Okagawa fails to disclose or suggest an address converter configured to convert the first address of the destination mobile terminal which is included in a packet received from the source mobile terminal as a destination address, to the second address of the destination mobile terminal which is associated with the first address of the destination mobile terminal in the first address memory, as defined in Claim 1.

- The Examiner respectfully disagrees. The limitations of claim 1 do not require that the first address is deleted and replaced with a second address. The limitations of claim 1 require that the first address utilized to route the packet is converted to a second address utilized to route the packet. Okagawa meets the above limitations of claim 1 because Okagawa describes that gate node 102 *encapsulates* the received packet for the mobile station 109 into the packet for the edge node 105. Therefore, in Okagawa, while the packet to which the IP address of the edge node 105 is added still includes the IP address of the destination mobile station 109, the first address utilized to route the packet is converted to a second address utilized to route the packet.

- In the Remarks on page 17 of the Amendment, the Applicant contends that Okagawa fails to disclose or suggest an address converter configured to convert the second address of the destination mobile terminal which is included in the received packet as a destination address, to the first address

of the destination mobile terminal which is associated with the second

address of the destination mobile terminal in the second address memory, as

defined in Claim 1.

- The Examiner respectfully disagrees. The limitations of claim 1 do not require

  that the second address is deleted and replaced with a first address. The

  limitations of claim 1 require that the second address utilized to route the

  packet is converted to a first address utilized to route the packet. Okagawa

  meets the above limitations of claim 1 because Okagawa describes that edge

  node 105 *extracts* the encapsulated packet for the mobile station 109.

  Therefore, in Okagawa, while the extracted IP address of mobile station 109

  was already in the packet received at edge node 105, the second address

  utilized to route the packet is converted to a first address utilized to route the

  packet

- In the Remarks on page 18 of the Amendment, the Applicant contends that

  Okagawa fails to disclose or suggest an instructor configured to instruct a

  source router connected to a source mobile terminal via a radio circuit and a

  destination router connected to the destination mobile terminal via a radio

  circuit to store the first address of the destination mobile terminal associated

  with the second address of the destination mobile terminal, as defined by

  Claim 1.

- The Examiner respectfully disagrees. The location information server (100)
  does instruct edge node 105 (which acts as a destination router) to store the
  IP address of mobile station 109 which is associated with the address of edge
  node 105 during handover as described in column 9 line 42 - column 10 line
  39.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in
this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP
§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37
CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE
MONTHS from the mailing date of this action. In the event a first reply is filed within
TWO MONTHS of the mailing date of this final action and the advisory action is not
mailed until after the end of the THREE-MONTH shortened statutory period, then the
shortened statutory period will expire on the date the advisory action is mailed, and any
extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of
the advisory action. In no event, however, will the statutory period for reply expire later
than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the
examiner should be directed to BRIAN ROBERTS whose telephone number is
(571)272-3095. The examiner can normally be reached on M-F 10:00-7:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wing Chan can be reached on (571) 272-7493. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

BSR
04/07/2008

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4/9/08